



# USE OF TECHNOLOGICAL TOOLS IN EFFECTIVE TEACHING LEARNING

Vishal S. Kore<sup>1</sup> | Santosh V. Jadhav<sup>2</sup>

<sup>1</sup> Assistant Professor, Department of Information Technology, Finolex Academy of Management and Technology, Ratnagiri.

<sup>2</sup> Associate Professor, Department of Information Technology, Finolex Academy of Management and Technology, Ratnagiri.

## ABSTRACT

Now a day the technology is growing so fast and smart phones, laptops, tablets, with high speed internet are available everywhere. Due to evolution in technology students are getting all type of information instantly, if someone wants something may be it can be technical or non-technical information students are utilizing these resources. The students of this generation are more techno-savvy that's why teaching is now a more challenging job. The students are expecting more and more from teacher. Traditional teaching is not sufficient to fulfill student's knowledge thirst. To make teaching learning process effective teachers need to use new and innovative tools while teaching to students. In this paper some technological tools are explained which can be used for effective teaching learning process.

**KEYWORDS:** Effective teaching learning, Technological tools.

## INTRODUCTION:

India will have the world's second-largest Internet user base by this December, overtaking the US. This is among the many interesting findings in the 'Internet in India 2015' Report released by the Internet and Mobile Association of India (IAMAI) and IMRB International [1]. Thus it a genuine attempt to improve teaching learning process by using this free platform. Modern innovations in different tools and techniques will not create any extra burden on student but it will create an enthusiasm and eagerness towards learning.

Parents now days are under deep worries that a child is continuously getting addicted towards the excess use of mobile phones, social networking sites and apps. As a result, we are trying to focus their minds by using same resources towards e- learning. These tools will thus play a vital role to stretch a helping hand for students and that to free of cost.

Asia has the world's highest regional growth rate for E-Learning, of 17.3%. Revenues from the sale of E-Learning reached \$5.2 billion in 2011 and are expected to more than double to \$11.5 billion by 2016. The vast majority of these revenues will be generated from the sales of packaged content. Throughout the whole of Asia, Government-funded projects related to literacy development in rural areas are a major driver to the introduction of E-Learning.

Focusing specifically on the Indian Market, the E-Learning industry in India was valued at INR 18.41 trillion in 2010/2011. Increasing Internet penetration, low-cost existing coverage and rising demand are expected to help this market develop strongly in the near future. The Ken Research Group report, 'India's E-Learning Market Outlook to FY2018 Increasing Technology Adoption to Drive Future Growth', estimates that the market should grow at a Compound Annual Growth Rate (CAGR) of 17.4% over the period FY2013 to FY2018 [2]. Thus we can see the change occurring in global educational system and increased use of e-learning and e-content.

Few technical tools that we can use for efficient teaching are as follows.

- 1) *Google Apps*: It is suite of applications and various tools. There are many tools that let you collaborate, communicate, and share your knowledge with students.
- 2) *Skype*: it's proven to be an effective way to collaborate and communicate with others around the world. It saves money and lets us communicate with expert faculties of different universities and countries at ongoing lecture and practical also.
- 3) *YouTube*: It is a video search engine where we can get videos of almost all subjects of all disciplines and many more. If we have active internet connection in our class, we can show videos of related contents that we are teaching in class or we can download relevant video and display the same in class.
- 4) *DropBox*: with the help of DropBox we can store our data, projects, videos and important documents in cloud. Once you have stored your files at DropBox you can access it from anywhere from any device.
- 5) *Whats app and Facebook app*: We generally thought that these are the social networking apps which are only used for entertainment or timepass but through these apps only we can reach to our students instantly. If we want to

share any study material to students, we just need to post it into the group. Any important message we can circulate among the students on whats app.

- 6) *E-content*: Many contents related to different subjects are available on internet which includes video lecture series, ppts, animations, pdfs, and blogs written by experts which needs to be shared with students.

Very few students will search these things online but if we tell them the importance of E-content they will start using it, may be first time we need to collect and circulate these things among the students but once they understand the importance of E-content students will definitely search it by them in next semester.

- 7) *Small SEO tools*: Small SEO tools are available online we can use that while teaching like plagiarism checker to find out copy contents of reports and assignments submitted by students. Grammar Checker can be used to check the grammar of our notes that we are going to circulate among the students. It can be also used to check grammar of project reports and assignments submitted by students. Many SEO tools are available we can utilize that as per requirements.

- 8) *Moodle*: It is a free, online Learning Management system enabling educators to create their own private website filled with dynamic courses that extend learning, anytime, anywhere.

Whether you're a teacher, student or administrator, Moodle can meet your needs. Moodle's extremely customizable core comes with many standard features like Modern, easy to use interface, Personalized Dashboard, Collaborative tools and activities, convenient file management, Simple and intuitive text editor, Track progress Secure authentication and mass enrolment and Manage user roles and permissions etc.

- 9) *Online courses*: teachers can upgrade their knowledge with online courses and certifications. E.g. Coursera, every course on Coursera is taught by top instructors from the world's best universities and educational institutions. Courses include recorded video lectures, auto-graded and peer-reviewed assignments, and community discussion forums. When you complete a course, you'll receive a sharable electronic Course Certificate.
- 10) *Animoto*: Animoto makes it simple to create video-based lessons or presentations for the classroom and to share them with students or anyone else.
- 11) *StudySync*: With a digital library, weekly writing practice, online writing and peer reviews, Common Core assignments, and multimedia lessons available, this site is a fully-featured tool for teaching and learning that can be a big help in the classroom.
- 12) *Educational Games*: Website that provides links to educational games are very useful in efficient teaching and learning process. E.g. [www.apples4theteacher.com/](http://www.apples4theteacher.com/)
- 13) *Flipbook*: It is used to create Simple Animations and to Share with the World. <http://www.benettonplay.com/toys/flipbookdeluxe>
- 14) *Google Tools for Teachers*: Website that provides teacher resources. Check

the website <http://www.google.com/edu/teachers/index.html>

- 15) *Puzzlemaker*: it is online resource that can create puzzles. Check the website <http://www.discoveryeducation.com/puzzlemaker/>
- 16) *Slideshare*: With the help of slide share we can Upload and Share PowerPoint, Documents, and Adobe PDF Portfolios.
- 17) *Wordpress*: Through which we can Create and Share Blogs based on our syllabus [5]. Check the website <http://wordpress.com>.
- 18) *Software*: If you have knowledge of programming languages, you can create your own software tools to improve teaching learning e.g. crosswords, puzzles and online sites to host information and to conduct online tests.
- 19) *Online editors and tutorials with example*: for students who are interested in learning new technologies many online editors are present such editors can be used for hands on practice of programming languages by students. E.g. JS.do Online JavaScript Editor and W3Schools.
- 20) *Online tools for students*: students can use many online tools to complete their project reports e.g. Piktochart, online gantchart, online photoshop tools etc.

One Real time example of tool used in effective teaching is mentioned below.

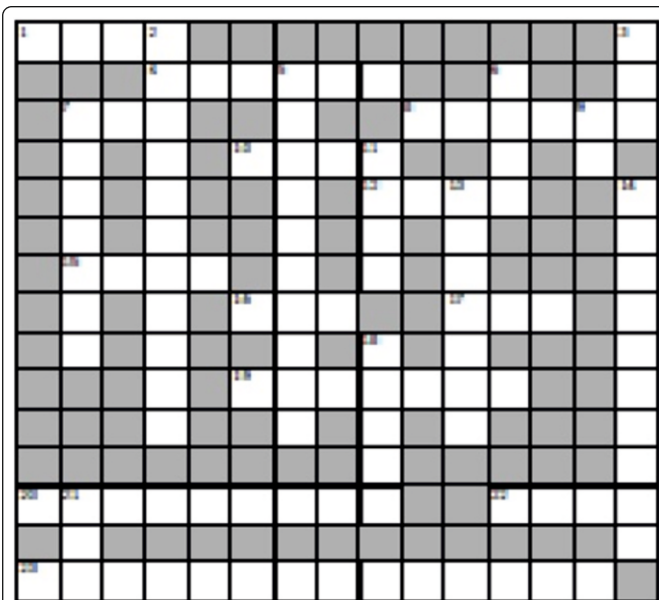


Figure 1: Example of Crossword

The above mentioned tool is created with the help of MS-Excel by the Prof. Santosh Jadhav, who is associate professor at Finolex Academy of Management and Technology, Ratnagiri. We have used this tool for effective teaching learning. We have used prof. Santosh Jadhav's crossword's template to create crossword for the subject which we are teaching. It is observed that this innovative tool became popular among students. all students appreciated this innovative concept used in teaching learning process.

Questions of Crosswords horizontal and vertical are as follows.

#### DOWN

2. One of the key benefits of using cloud computing
3. Hypervisor present at HAL level
5. The key feature of cloud environment
6. Anything as a service in cloud
7. Group of Same type of computers is known as
9. One of the implementation levels of virtualization
11. Provide software applications as a service
13. Type of Cloud designed for a Single organization
14. Also known as virtual machine monitor
18. Private, Public, Hybrid are the types of ?
21. Short form of application programming interface

Figure 2: Vertical questions of crosswords

#### ACROSS

1. One of the service delivery model of Cloud
4. one of the cloud Computing components
7. Solve heterogeneity in mobile cloud computing
8. Name of popular Cloud service provider
10. Short form of platform as a service
12. Also known as Coign
15. ... clients do not have internal hard drives.
16. Combination of cloud computing and mobile computing
17. short form of virtual machine monitor
19. Type of computing in which computing resources are provided as service
20. ... is used to monitor level of cloud service.
22. Name of SaaS provider company
23. Creating virtual version of device or resource.

Figure 3. Horizontal questions for crosswords

Subject teachers are supposed to prepare the crossword for their subject and they can circulate the crosswords among students.

#### OBSERVATIONS AND RESULTS:

It is observed that students liked the assignments in the form of Crossword rather than writing answers to questions.

Table 1: Statistic of students

Total Strength of Class	Students liked Crossword solving as an assignment	Students doesn't like crossword solving as an assignment
82	79	03

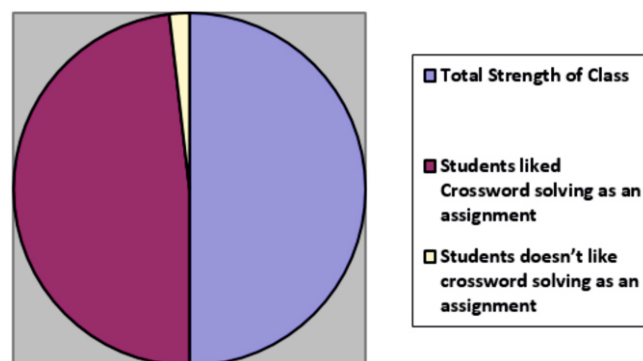


Figure 4: Statistics of students like and dislike about Crossword tool.

Impact on Faculty feedback after using Crossword tools in teaching process is mentioned below.

Table 2: Effect on Faculty feedback

Criteria	Before / After use of Crossword tool	No. of Students given Feedback	Avg. Score out of 10 for Innovative tools usage in feedback	Feedback month
Innovative tools used in teaching	Before	80	5	July
	After	80	8.5	August

Here we can easily observe the increase in Avg. score for criteria use of Innovative tools in teaching.

#### CONCLUSIONS:

If teachers want to make their teaching interesting, they want to convey their knowledge to students efficiently, for that they need to use technological tools. Change is need of time and the teaching profession is also changing with the time it is better to adapt this change and become the part of student's growth.

It has been observed that students are showing more interests in learning when teachers are using the innovative technological tools in their teachings.

#### Acknowledgement:

We want to thank Prof. Santosh Jadhav for sharing their Crossword tool with me.

**REFERENCES:**

1. <https://yourstory.com/2015/11/india-internet-user-base-2015/>
2. E-Learning Market Trends & Forecast 2014 - 2016 Report A report by Docebo, March 2014.
3. <http://www.edudemic.com/the-10-most-popular-teacher-tools/>
4. <https://globaldigitalcitizen.org/50-edtech-technology-tools>.
5. <http://teacherworld.com/pete&c2012pres1.html>.